Serial No.: 09/757,632

Filed : January 11, 2001

Page : 3 of 11

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (currently amended) A method for conducting capillary zone electrophoresis in a capillary, the method comprising:

adding sodium dodecylsulfate (SDS) to a first sample to be electrophoresced; injecting the first sample into a first end of said capillary;

applying a first voltage differential across said first end of said capillary and a second end of said capillary to cause said first sample to migrate in a medium suitable for capillary zone electrophoresis;

adding SDS to a second sample to be electrophoresced;

injecting said second sample into said first end of said capillary without rinsing said capillary with [[NaOH]] <u>hydroxide</u> intermediate the steps of applying a first voltage and injecting a second sample; and

applying a second voltage differential across said first and second ends of said capillary to cause said second sample to migrate in said medium suitable for capillary zone electrophoresis.

- 2. (original) The method of claim 1, wherein a concentration of SDS is below its critical micelle concentration of 8 mM.
- 3. (currently amended) A method for conducting capillary zone electrophoresis in a capillary, the method comprising:

adding sodium dodecylsulfate (SDS) to a first sample to be electrophoresced;

Serial No.: 09/757,632 Filed: January 11, 2001

Page : 4 of 11

applying a first voltage differential across ends of said capillary to cause said first sample to migrate in a medium suitable for capillary zone electrophoresis;

rinsing the capillary with a buffer; adding SDS to a second sample to be electrophoresced; and applying a second voltage differential across ends of said capillary to cause said second sample to migrate, without rinsing the capillary with [[NaOH]] hydroxide between application of said first and second voltage differentials.

4. (currently amended) A method for conducting capillary zone electrophoresis in a capillary having first and second ends, the method comprising:

providing a sodium dodecylsulfate (SDS)-containing buffer for receiving the first end of the capillary;

applying a first voltage differential across the first and second ends to cause a first sample in said capillary to migrate in a medium suitable for capillary zone electrophoresis;

injecting said second sample into said first end of said capillary without rinsing said capillary with [[NaOH]] <u>hydroxide</u> intermediate the steps of applying a first voltage and injecting a second sample; and

applying a second voltage differential across the first and second ends to cause the second sample to migrate in the medium suitable for capillary zone electrophoresis.

5. (currently amended) A method for conducting electrophoresis in a capillary having first and second ends, the method comprising:

injecting into the first end of the capillary a first sample;

subjecting the first sample to electrophoresis in the presence of a buffer comprising sodium dodecylsulfate (SDS), the step of subjecting comprising:

contacting the first end of the capillary with a volume of the buffer; and applying a first voltage differential across the first and second ends of the capillary;

after application of the first voltage differential, injecting into the first end of the

Serial No.: 09/757,632 Filed: January 11, 2001

Page : 5 of 11

capillary a second sample; and

subjecting the second sample to electrophoresis in the presence of a second buffer comprising SDS, the step of subjecting the second sample to electrophoresis comprising:

contacting the first end of the capillary with a volume of the second

buffer; and

applying a second voltage differential across the first and second ends of the capillary without rinsing the capillary with [[NaOH]] <u>hydroxide</u> intermediate the application of the first and second voltage differentials.

6. (currently amended) The method of claim 5, further comprising: after application of the second voltage differential:

injecting into the first end of the capillary a third sample; and subjecting the third sample to electrophoresis in the presence of a third buffer comprising SDS, the step of subjecting the third sample to electrophoresis comprising:

contacting the first end of the capillary with a volume of the third

buffer; and

applying a third voltage differential across the first and second ends of the capillary without rinsing the capillary with [[NaOH]] <u>hydroxide</u> intermediate the application of the first and third voltage differentials.

7. (currently amended) The method of claim 6, further comprising:

after application of the third voltage differential:

injecting into the first end of the capillary a fourth sample; and subjecting the fourth sample to electrophoresis in the presence of a fourth buffer comprising SDS, the step of subjecting the fourth sample to electrophoresis comprising:

contacting the first end of the capillary with a volume of the fourth

buffer; and

Serial No.: 09/757,632 Filed: January 11, 2001

Page : 6 of 11

applying a fourth voltage differential across the first and second ends of the capillary without rinsing the capillary with [[NaOH]] <u>hydroxide</u> intermediate the application of the first and fourth voltage differentials.

- 8. (previously presented) The method of claim 6, wherein each of the first, second, and third buffers is a borate buffer.
- 9. (previously presented) The method of claim 5, wherein a concentration of the SDS in the first and second buffers is less than a critical micelle concentration of the SDS in the first and second buffers.
- 10. (currently amended) The method of claim 5, wherein a ratio of each of the first and second voltage differentials to a length between the first and second ends of the capillary is [[+210]] + 200 V/cm.
- 11. (currently amended) A method for conducting electrophoresis in a capillary having first and second ends, the method comprising:

injecting into the first end of the capillary a first sample;

subjecting the first sample to electrophoresis in the presence of a buffer comprising a liquid detergent, the step of subjecting comprising:

contacting the first end of the capillary with a volume of the buffer; and applying a first voltage differential across the first and second ends of the capillary;

after application of the first voltage differential, injecting into the first end of the capillary a second sample; and

subjecting the second sample to electrophoresis in the presence of a second buffer comprising the <u>liquid lubricating</u> detergent, the step of subjecting the second sample to electrophoresis comprising:

Serial No.: 09/757,632 Filed: January 11, 2001

Page : 7 of 11

contacting the first end of the capillary with a volume of the second

buffer; and

applying a second voltage differential across the first and second ends of the capillary without rinsing the capillary with [[NaOH]] hydroxide intermediate the application of the first and second voltage differentials.

12. (currently amended) The method of claim 11, further comprising:

after application of the second voltage differential:

injecting into the first end of the capillary a third sample; and subjecting the third sample to electrophoresis in the presence of a third buffer comprising the <u>liquid lubricating</u> detergent, the step of subjecting the third sample to electrophoresis comprising:

contacting the first end of the capillary with a volume of the third

buffer; and

applying a third voltage differential across the first and second ends of the capillary without rinsing the capillary with [[NaOH]] <u>hydroxide</u> intermediate the application of the first and third voltage differentials.

13. (currently amended) The method of claim 12, further comprising:

after application of the third voltage differential:

injecting into the first end of the capillary a fourth sample; and subjecting the fourth sample to electrophoresis in the presence of a fourth buffer comprising the <u>liquid lubricating</u> detergent, the step of subjecting the fourth sample to electrophoresis comprising:

contacting the first end of the capillary with a volume of the fourth

buffer; and

Serial No.: 09/757,632 Filed: January 11, 2001

Page : 8 of 11

applying a fourth voltage differential across the first and second ends of the capillary without rinsing the capillary with [[NaOH]] <u>hydroxide</u> intermediate the application of the first and fourth voltage differentials.

- 14. (previously presented) the method of claim 11, wherein each of the first, second, and third buffers is a borate buffer.
- 15. (currently amended) The method of claim 11, wherein a ratio of each of the first and second voltage differentials to a length between the first and second ends of the capillary is [[+210]] +200 V/cm.
- 16. (Currently amended) A method for conducting electrophoresis, comprising: subjecting a first sample to electrophoresis within a capillary and in the presence of sodium dodecylsulfate (SDS); and

subjecting a second sample to electrophoresis within the capillary and in the presence of SDS without rinsing the capillary with [[NaOH]] hydroxide intermediate the steps of subjecting the first sample to electrophoresis and subjecting the second sample to electrophoresis.

17. (currently amended) The method of claim 16, further comprising:

after subjecting the second sample to electrophoresis, subjecting a third sample to electrophoresis within the capillary and in the presence of SDS without rinsing the capillary with [[NaOH]] hydroxide intermediate the steps of subjecting the first sample to electrophoresis and subjecting the third sample to electrophoresis.

18. (currently amended) The method of claim 17, further comprising:

after subjecting the third sample to electrophoresis, subjecting a fourth sample to electrophoresis within the capillary and in the presence of SDS without rinsing the capillary with

Serial No.: 09/757,632 Filed: January 11, 2001

Page : 9 of 11

[[NaOH]] <u>hydroxide</u> intermediate the steps of subjecting the first sample to electrophorsis and subjecting the fourth sample to electrophoresis.

19. (previously presented) The method of claim 16, wherein the SDS is present at a concentration of less than a critical micelle concentration of the SDS.

20. (currently amended) A method for conducting electrophoresis, comprising:

subjecting a first sample to electrophoresis within a capillary and in the presence of a lubricating detergent; and

subjecting a second sample to electrophoresis within the capillary and in the presence of the lubricating detergent without rinsing the capillary with [[NaOH]] hydroxide intermediate the steps of subjecting the first sample to electrophoresis and subjecting the second sample to electrophoresis.

21. (currently amended) The method of claim 20, further comprising:

after subjecting the second sample to electrophoresis, subjecting a third sample to electrophoresis within the capillary and in the presence of the lubricating detergent without rinsing the capillary with [[NaOH]] hydroxide intermediate the steps of subjecting the first sample to electrophoresis and subjecting the third sample to electrophoresis.

22. (currently amended) The method of claim 21, further comprising:

after subjecting the third sample to electrophoresis, subjecting a fourth sample to electrophoresis within the capillary and in the presence of the lubricating detergent without rinsing the capillary with [[NaOH]] hydroxide intermediate the steps of subjecting the first sample to electrophoresis and subjecting the fourth sample to electrophoresis.